

## PHOTOTHERMAL ACTUATOR

### AND APPARATUS COMPRISING PHOTOTHERMAL ACTUATOR

5

#### ABSTRACT OF THE DISCLOSURE

A photothermal actuator comprises an optical fiber  
10 bundle, a light inputting apparatus, and a thermal receiving  
element. The optical fiber bundle is inserted in a tube of  
a catheter etc. The light inputting apparatus inputs light  
into the optical fiber bundle. The thermal receiving element  
is provided on a part of an outer surface of the optical fiber  
15 bundle. The thermal receiving element is heated by the light  
so that the thermal receiving element and a part of the optical  
fiber bundle are stretched, whereby the optical fiber bundle  
and the tube are bent.